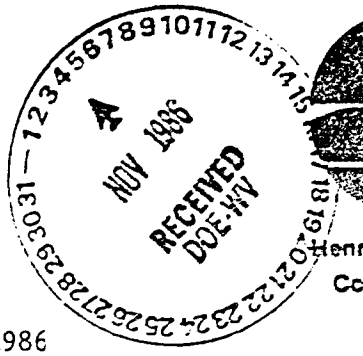
New York State Department of Environmental Conservation
600 Delaware Avenue, Buffalo, NY 14202-1073



Henry G. Williams
Commissioner

October 28, 1986

Mr. J. P. Hamric
Department of Energy
Idaho Operations Office
West Valley Project Office
P.O. Box 191
West Valley, NY 14171

Dear Mr. Hamric:

This Department approves the closure plan for the construction landfill located at the West Valley Nuclear Services Co. site at West Valley, NY. Subsequent inspections have found the work to be performed to specifications and in conformance with the regulatory requirements for landfill closures.

Please note that perpetual maintenance of mowing the cover, controlling erosion, correcting leachate breakouts, filling any slumped or any breach of the cover is the responsibility of the site owner. In addition, an annual report should be submitted to this office describing the condition of the site and any remedial work done to the landfill during the previous year. This report is due by December 31st of each year.

Should you have any questions concerning this matter, feel free to contact Mr. Robert Wozniak at 716-847-4585.

Very truly yours,

Robert J. Mitrey, P.E.
Associate Sanitary Engineer

cc: Mr. Ted Adams
Mr. Andrew Mikkola

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 2

To E. MATTHEWS	From T. DIGIULIO
Co. DOE	Co. NYSDEC
Dept. West Valley	Phone #
Fax # (716) 942-4703	Fax #

New York State Department of Envir
50 Wolf Road, Albany, New York 12233

DOW:93:1413-RFI

EAB:191:93-2343:93:07

10-18-93

ng

Commissioner

Mr. Richard Provencher
Environmental, Safety, Health and
Quality Manager
US Department of Energy
West Valley Project Office
PO Box 191
West Valley, NY 14171-0191

Dear Mr. Provencher:

RE: Final Approval of the West Valley Demonstration
RCRA Facility Investigation (RFI) Workplan

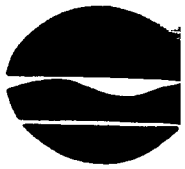
The New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) have completed review of the revised 'Project Management Plan Schedule - RFI Work Plan' attached to your September 23, 1993 letter.

Based on this revised schedule, and all previously approved comments, the NYSDEC and USEPA approve the RFI Workplan dated Spring 1993. In accordance with Section XII of the 3008(h) Order on Consent, this approval incorporates the following items into the Order:

- "Revised" Draft RCRA Facilities Investigation (RFI) Work Plan, West Valley Demonstration Project, West Valley, New York, Spring 1993, (WVDP-RFI-014, Rev. 0, Draft B), in conjunction with:
- Comment Response Package on "Revised" Draft RCRA Facilities Investigation (RFI) Work Plan, dated August 6, 1993, in conjunction with:
- Selected Comment Response Package Following August 12, 1993 Meeting on "Revised" Draft RCRA Facilities Investigation (RFI) Work Plan, dated August 23, 1993, in conjunction with:
- The Revised 'Project Management Plan Schedule - RFI Work Plan' attached to your September 23, 1993 letter.

In order to keep the RFI Workplan a 'working document', we request that appropriate replacement pages incorporating the comments and schedule into the RFI Workplan be completed and submitted to both agencies by November 1, 1993.

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220



Langdon Marsh
Commissioner

October 20, 1994

Ms. Elizabeth Matthews
Manager, Environmental Programs
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Matthews:

U.S. Department of Energy
RCRA Facility Investigation
Supplemental Solid Waste
Management Units

The New York State Department of Environmental Consevation (NYSDEC) and the United States Environmental Protection Agency (USEPA) have completed review of the Preliminary Reviews (PR) for 12 Solid Waste Management Units (SWMU) submitted with your letter dated June 20, 1994. A determination of no further action (NFA) has been made for five (5) of these SWMUs which are listed below. The determination was based on the review of the PRs, the Visual Site Inspection conducted by the NYSDEC and the additional data collected as part of the ongoing RCRA Facility Investigation (RFI).

1. Cold Hardstand (SWMU #30)

2. Old Sewage Treatment Facility (SWMU #32)

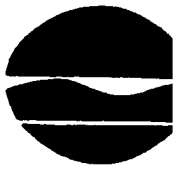
3. Existing Sewage Treatment Plant/Waste Water Treatment Facility (SWMU #33)

4. Well Purge Water Locations (SWMU #34)

5. Concrete Washdown Area (SWMU #35)

The comments regarding the remaining seven SWMU's will be presented in a separate letter.

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220



Langdon Marsh
Commissioner

November 21, 1994

Ms. Elizabeth A. Matthews
Manager, Environmental Programs
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Matthews:

Supplemental SWMUs Preliminary Reviews

The New York State Department of Environmental Conservation (DEC) and the United States Environmental Protection Agency (USEPA) have completed review of the seven remaining Supplemental Solid Waste Management Unit (SWMU) Preliminary Reviews (PRs). These PRs are part of the Department of Energy (DOE) submission dated June 20, 1994. Of the 12 PRs in that submission, 5 of them have already been reviewed, and a response dated October 20, 1994, from the DEC and USEPA was transmitted to the DOE. This letter will respond to the remaining seven.

- SWMU #28 Vitrification Hardstand - The PR indicates that no hazardous wastes or substances have been released to the environment from this location. The Visual Site Inspection (VSI) performed by the DEC supported the PRs statements.

- SWMU #29 Industrial Waste Storage Area (IWSA) - Section C of the PR states that no RCRA hazardous waste was staged at the IWSA. However, Attachment I - Typical Wastes Managed at the IWSA lists sulfuric acid which could be a hazardous waste by characteristic. Pending the review of the pertinent RFI analytical data for surface and sub-surface soil samples, a future determination of no further action (NFA) is likely. A final determination regarding future action can then be made after review of that data.

It is apparent from the comments listed above that the analytical data from the RFI environmental sampling program must be examined by the DEC and USEPA before a final determination can be made regarding future action at several SWMUs. This data should be provided as soon as it is available.

If you have any questions regarding this letter, contact Mr. John Krajewski of the DEC at (716) 851-7220 or Mr. John G. Nevius of the USEPA at (212) 264-9578. You are requested to notify the DEC and USEPA Region II of your intended response to this letter no later than December 5, 1994.

Sincerely,

Timothy I. DiGiulio, P.E.
Project Coordinator
Bureau of Western Hazardous Waste Programs

Andrew Bellina, P.E.
Chief
Hazardous Waste Facilities Branch
USEPA, Region II

cc: Mr. John Krajewski - NYSDEC, Region 9
Mr. Paul Merges - NYSDEC, Albany
Mr. John Nevius - USEPA, Region II
Ms. Colleen Gerwitz - NYSERDA, West Valley
Ms. Laurene Krieger - WVNS, West Valley

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7251
518-457-9253 FAX 518-457-9240

Langdon Marsh
Commissioner

DEC 1 2 1994

Ms. Elizabeth A. Matthews
Manager, Environmental Programs
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Matthews:

RE: Sealed Rooms Paper Investigation Report

The New York State Department of Environmental Conservation (DEC) and the Environmental Protection Agency (EPA) have completed their review of the *Final Sealed Rooms Paper Investigation Report*, dated May 1994. The sealed rooms were defined as Solid Waste Management Units (SWMUs) and assessment to the potential for release of hazardous waste or hazardous constituents from these SWMUs is required pursuant to the RCRA 3008(h) Order on Consent.

On the basis of information in the report, and review of preliminary groundwater sampling data received as part of the RCRA Facility Investigation (RFI), it appears that the sealed rooms do not pose a significant threat from the release of hazardous waste or hazardous constituents into the environment. However, there are certain rooms that have, or had the potential to contain RCRA hazardous constituents, and further information is necessary to determine if there is potential for impact to the environment. Attached is a summary sheet containing a room description, comments or additional requested information. These comments were also discussed in a meeting that was held on November 18, 1994. It is requested that the additional information be submitted to the Agencies no later than February 1, 1995.

If you have any questions regarding this matter, please contact the DEC Project Coordinator at (518) 457-9253 or the EPA Project Coordinator, John Nevius, P.E. at (212) 264-9578.

Sincerely,

Timothy I. DiGiulio, P.E.
Project Coordinator
Bureau of Western Haz. Waste Programs
Division of Haz. Substances Regulation

for Andrew Bellina, P.E.
Chief
Hazardous Waste Facilities Branch
USEPA, Region II

Attachment

cc w/att: C. Gerwitz, NYSERDA W. Valley
J. Nevius, EPA, Reg II
F. Shattuck, DEC Region 9

No.	Room Name	Notes - Room Description	Concerns - Further Information Needed
	Acid Recovery Cell (elevation 111.5 ft)	This cell recovered and concentrated nitric acid through evaporation and fractionation for the reuse in the process.	This room is not labeled or illegible in figure 13. Although sump located in this room appears dead, little is known a it or its integrity. Supply additional information on the su if it exists. * Unknown liquid in vessel 7C-5 may need characterization.
10	Acid Pump Rooms (elevation 100 ft)	This cell housed pumps that transferred acid streams from the Acid Recovery Cell to various plant locations.	Waste was discharged to the interceptors via floor drain. Floor and walls in poor condition due to corrosion of acid spills and leaks on the concrete. Provide details on spills, they exist. Sampling data from the RFI should be evaluate determine if hazardous constituents could have been released.
11	Hot Acid Cell (elevation 148 ft)	Contains storage tanks for nitric acid that was used to dissolve nuclear fuel in the Chemical Process Cell.	Floor drain connects to a tank in the Acid Recovery Cell. I 1972 tank contents removed and decontaminated. **No Further Action Required.**
12	Off-gas Cell (elevation 100 ft)	Contains the equipment for venting gases from the dissolver in the Chemical Process Cell and other off-gas vessels.	*Quantities of mercury were used during operations, thus the potential for haz. waste. Floor sump received acid wastes with floor in poor condition. It should be determine if this sump was lined with stainless steel or other protective coating to deter acid corrosion. Supply informati on the poor condition of concrete construction joints.
13	Off-gas Blower Room (elevation 101.25 ft)	Cell contains the blowers, filters, and scrubbers for the off-gas system.	A floor drain connects to the sump in the Off-gas Cell. Pum niches are stainless steel lined. **No Further Action Required.**
14	Ventilation Wash Room (elevation 114.5 ft)	Contains an air washer and duct work that scrubs ventilation air from various cells.	How did the VWR leak into and contaminate the RER?
15	Scrap Removal Room (elevation 100 ft)	Drums and casks were loaded onto truck trailers then de-contaminated prior to NDA disposal.	SRM contains a drain that connects with the interceptor. Sampling data from the RFI should be evaluated to determin if hazardous constituents could have been released. *Uncharacterized wastes in tank could contain RCRA Characteristics Hazardous Wastes.
16	Master Slave Manipulator (elevation 100 ft)	Received, decontaminated, and repaired manipulators used in the hot chemical cell and laboratory.	Sumps drained to underground tank 15D-6 which was sampled and deemed TC non-hazardous. No leak detection for tank but monitoring well in the vicinity. Do the results from sampling indicate a release from the tank? Supply sampling results.

* ...ner RCRA hazardous waste characterization may be necessary in these rooms.

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220

RW:95:0004

Langdon Mar
Commissioner

January 12, 1995

Ms. Elizabeth A. Matthews
Manager, Environmental Programs
United States Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Matthews:

Subcontractor Maintenance Area
Resource Conservation and Recovery
Act (RCRA)
Facility Assessment Report Revisions

The New York State Department of Environmental Conservation (DEC) and the United States Environmental Protection Agency (EPA) have completed review of your submission dated December 8, 1994. That submission included revised pages to be included in the report referenced above and revised responses to the review comments previously provided by the DEC and EPA.

The revised pages contain the recommended changes and/or clarifications requested and will replace the corresponding pages in the draft report dated August 1994. The revised responses to the agency comments are also satisfactory, and no further clarification is required. Based on this information, a determination of no further action is made, providing new information, such as the RCRA Facility Investigation, does not indicate cause for reconsideration.

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220

Langdon Mai
Commissione

Recd.
Rec. Mgmt.
February 3, 1995

RW:95:0008

February 1, 1995

Ms. Elizabeth Matthews
Manager, Environmental Programs
United States Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Matthews:

Resource Conservation and Recovery Act
(RCRA)
Facility Assessment (RFA) - SWMU #36
Old Schoolhouse Septic System

The New York State Department of Environmental Conservation (DEC) and the United States Environmental Protection Agency (EPA) have completed review of your submission dated December 22, 1994.

The RFA indicates there was limited use of hazardous substances at this facility and the analytical results from the distribution box reveal only low ppb levels of four volatile organic compounds in the sediment. Metals were not detected at levels of concern. Radiological results detected levels below background.

The Visual Site Inspection detected no evidence of waste material, stained soil, stressed vegetation, or other release to the environment. During the distribution box sampling, the length of the discharge pipe was exposed from the building to the distribution box and displayed no signs of leakage. Therefore, a determination of no further action is made for Old Schoolhouse Septic System SWMU #36.

New York State Department of
Environmental Conservation
270 Michigan Avenue, Buffalo, New York
14203-2999

RW:95:0026

May 22, 1995

Ms. Elizabeth Matthews
Manager, Environmental Programs
United States Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

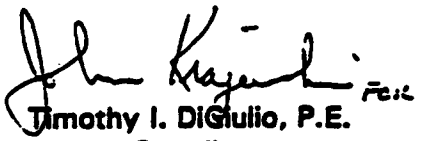
re: Resource Conservation and Recovery Act (RCRA)
Facility Assessment for the Fire Brigade Training
Area Solid Waste Management Unit (SWMU) #27

Dear Ms. Matthews:

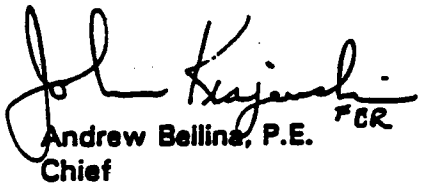
The New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) have completed review of the document referenced above. There is no evidence of the release of hazardous wastes or constituents to the environment from this SWMU. Therefore, a determination of no further action is made for the Fire Brigade Training Area - SWMU #27.

Any questions regarding this determination should be directed to Mr. Jack Krajewski of the NYSDEC Buffalo office (716-851-7220) or Mr. John Nevius, P.E. of USEPA Region II office in New York City (212-637-4178).

Very truly yours,



Timothy I. DiGiulio, P.E.
Project Coordinator
Bureau of Western Hazardous Waste Programs



Andrew Bellina, P.E.
Chief
Hazardous Waste Facilities Branch
USEPA, Region II

cc: Mr. John Krajewski - NYSDEC, Buffalo
Mr. William Tetley - NYSDEC, Albany
Ms. Colleen Gerwitz - NYSERDA
Ms. Laurene Krieger - West Valley Nuclear Services
Mr. John Nevius - USEPA, Region II

a:SWMU27.RFA

Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7252
518-457-9253 FAX 518-457-9240

Michael D. Zagata
Commissioner

Ms. Elizabeth A. Matthews
Environmental Programs Manager
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

JAN 24 1996

Dear Ms. Matthews:

RE: 3008(h) Order on Consent
Final RCRA Facility Investigation (RFI) Report Review
Nuclear Regulatory Commission-Licensed Disposal Area -Volume 2

The New York State Department of Environmental Conservation and the Environmental Protection Agency (the "Agencies") have evaluated the final *RCRA Facility Investigation (RFI) Report, Nuclear Regulatory Commission-Licensed Disposal Area -Volume 2*, dated September 1995. The Agencies have made the following determinations and recommendations based on the contents and conclusions of the final report.

1. **The "No Further Action" Recommendation is Acceptable for the Short-term.** Based on the results of the RFI, the Agencies agree that there is no imminent threat to human health or the environment, but continued monitoring, maintenance and operation of the NDA Interceptor Trench is necessary. With this in mind, the 3008(h) Order on Consent indicates that the USEPA and NYSDEC will accommodate the DOE's efforts to coordinate and integrate the EIS process with work that may be required under this Order. Since the Environmental Impact Statement (EIS) will evaluate cleanup and closure criteria, the Agencies will review the sufficiency of the EIS, when available, as well as current monitoring information, to determine if additional activities should be performed under the 3008(h) Order.

2. **The "No Further Action" Recommendation may Not be Acceptable for the Long-term.** As discussed above, for the interim, we are in agreement with the "No Further Action" conclusion, and further monitoring and maintenance of the NDA. However, based on data included in the RFI Report, calculations indicate over 1,000,000 gallons of water may be infiltrating into the NDA on an annual basis. Although the NDA Interceptor Trench is anticipated to intercept releases associated with the weathered till, infiltration creates a continuous driving force for contamination downward into the unweathered till, and expedites migration of contaminants (leachate) towards the interceptor trench in the weathered till. Therefore, the long-term impacts of the current infiltration condition, in conjunction with the present soil cover, on contamination release and groundwater migration is an issue which needs evaluation.

DW; 96:0110
2/14/96

Cross Ref.
1607:95:01

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Hazardous Waste Facilities
50 Wolf Road, Albany, New York 12233-7252
518-457-9236 FAX 518-457-9240

Michael D. Zagata
Commissioner

July 23, 1996

Ms. Elizabeth A. Matthews
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, NY 14171-0191

Dear Ms. Matthews:

RE: 3008(h) Order on Consent
Nuclear Regulatory Commission-Licensed Disposal Area (NDA)

1. **Listed Hazardous Wastes Determination**
2. **Piezometer Installation Plan at the NDA**
3. **Associated NDA SWMUs**

The New York State Department of Environmental Conservation (NYSDEC) and the Environmental Protection Agency (USEPA) have evaluated your March 8, 1996 letter and revisions to the final "*RCRA Facility Investigation (RFI) Report, Nuclear Regulatory Commission-Licensed Disposal Area -Volume 2,*"; reviewed the draft "*NDA Piezometer Installation Plan,*" (attached to your March 20, 1996 letter); and, provided clarification of "*no further action*" for individual Solid Waste Management Units (SWMUs) located at the NDA.

1. **Inconclusive evidence to determine that listed hazardous wastes were disposed of in the NDA.** Based on initial information supplied by the USDOE, the Agencies determined that listed hazardous wastes were disposed of in the NDA. [Letter dated January 24, 1996, T. I. DiGiulio and A. Bellina to E. A. Matthews]. Based upon DOE's March 8, 1996 letter and revised NDA RFI text, we concur that insufficient evidence exists to support a determination that the disposal of listed hazardous wastes occurred at the NDA. Therefore, groundwater contaminated with leachate would not have to be managed as a hazardous waste. However, monitoring for constituents of concern will continue as part of the groundwater monitoring plan.

2. **Schedule and plan for additional piezometers approved.** The Agencies concur with the plan for installing three additional piezometers in the vicinity of the NDA interceptor trench to better evaluate its hydraulic impact. The plan and schedule associated with installation of the piezometers are acceptable.

1607:95:07

Division of Solid & Hazardous Materials
Bureau of Hazardous Waste Facilities
50 Wolf Road, Albany, New York 12233-7252
518-457-9253 FAX 518-457-9240

Michael D. Zagata
Commissioner

July 30, 1996

Ms. Elizabeth A. Matthews
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Matthews:

RE: 3008(h) Order on Consent
RCRA Facility Investigation (RFI) - Report Approval
Low-level Waste Storage Area (LLWSA) -Volume 6

The New York State Department of Environmental Conservation (DEC) and the Environmental Protection Agency (EPA) have completed review of the *RCRA Facility Investigation (RFI) Report, Low-level Waste Storage Area (LLWSA) -Volume 6*, dated September 1995. Based on that review, the Agencies concur with the conclusions and recommendations in the report.

Therefore, continued groundwater monitoring required by the RCRA Groundwater Monitoring Plan, in conjunction with the continued management and inspections of storage areas is sufficient. No further action is necessary.

If you have any questions regarding this matter, please contact the DEC Project Coordinator at (518) 457-9253 or Mr. James Reidy of the USEPA at (212) 637-4172.

Sincerely,

Timothy I. DiGiulio, P.E.
Project Coordinator
Bureau of Haz. Waste Facilities
Division of Solid and Haz. Materials

for Raymond Basso
Chief
RCRA Programs Branch
Environmental Planning & Protection Division
USEPA, Region II

cc w/att: C. Gerwitz, NYSERDA W. Valley
J. Reidy, USEPA, Reg II

0640:95:0

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Hazardous Waste Facilities
50 Wolf Road, Albany, New York 12233-7252
518-457-9253 FAX 518-457-9240

Michael D. Zagata
Commissioner

Ms. Elizabeth A. Matthews
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Matthews:

RE: 3008(h) Order on Consent
RCRA Facility Investigation (RFI) Report Review and Comments
Construction and Demolition Debris Landfill (CDDL) -Volume 3

The New York State Department of Environmental Conservation (DEC) and the Environmental Protection Agency (EPA) have evaluated the response to comments and text changes dated February 29, 1996 and April 30, 1996. Based on this evaluation, the final *RCRA Facility Investigation (RFI) Report, Construction and Demolition Debris Landfill (CDDL)* -Volume 3, dated April 1996 is acceptable.

Summarized below, are items included in the report's conclusions and recommendations for the continued long-term monitoring and maintenance necessary for this unit:

1. **Two additional rounds for metals in groundwater:** The conclusion indicated that there is no impact from the CDDL for metals (since natural occurring metal at this site vary greatly). However, as additional justification to the conclusion, two additional rounds of groundwater sampling for metals to support statistical evaluation have been collected. By October 30, 1996, submit a statistical analysis of this data to verify that this sampling supports the original conclusion.

2. **Additional sampling location:** To supplement the existing groundwater monitoring network for this unit, it was determined that a groundwater seep would be utilized. A survey of the groundwater seeps in the area has been completed and it was determined that the seep designated as SP-12 will be utilized as part of the groundwater monitoring program. This seep will be sampled in September (4th quarter 1996). A modification to the groundwater monitoring plan, which includes sampling location, constituents and frequencies, should be submitted by September 30, 1996.

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Hazardous Waste Facilities
50 Wolf Road, Albany, New York 12233-7252
518-457-9253 FAX 518-457-9240

Michael D. Zagata
Commissioner

November 4, 1996

Ms. Elizabeth A. Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Lowes:

RE: 3008(h) Order on Consent
RCRA Facility Investigation (RFI) Report Approval
Miscellaneous Small Units (MSU) -Volume 5

The New York State Department of Environmental Conservation (DEC) and the Environmental Protection Agency (EPA) have evaluated the comment and response package attached to your October 1, 1996 letter (comments dated 9/13/96, page revisions Rev. 0, Draft A). Based on this evaluation, the final *RCRA Facility Investigation (RFI) Report. Miscellaneous Small Units (MSU)* - Volume 5, Rev. 0, Draft A, is acceptable.

Based on the results of the RFI, the agencies concur with the conclusions and recommendations of the report. Therefore, continued groundwater monitoring required by the WVDP Groundwater Monitoring Plan is sufficient. No further action is necessary for this unit.

If you have any questions regarding this matter, please contact the DEC Project Coordinator at (518) 457-9253 or Mr. Brian Quinn, EPA Project Coordinator at (212) 637-3909.

Sincerely,

Timothy I. DiGiulio, P.E.
Project Coordinator
Bureau of Haz. Waste Facilities
Division of Solid and Haz. Materials

for Raymond Basso
Chief
RCRA Programs Branch
Environmental Planning & Protection Division
USEPA, Region II

cc: C. Gerwitz, NYSERDA W. Valley
B. Quinn, USEPA, Reg II
J. Krajewski, Region 9

43966
1528:95

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Hazardous Waste Facilities
50 Wolf Road, Albany, New York 12233-7252
518-457-9253 FAX 518-457-9240

Michael D. Zagata
Commissioner

Ms. Elizabeth A. Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

November 22, 1996

Dear Ms. Lowes:

RE: 3008(h) Order on Consent
RCRA Facility Investigation (RFI) - Report Approval
Chemical Process Cell Waste Storage Area - Volume 7

The New York State Department of Environmental Conservation (DEC) and the Environmental Protection Agency (EPA) have completed review of the *RCRA Facility Investigation (RFI) Report, Chemical Process Cell Waste Storage Area -Volume 7*, dated October 1995. Based on that review, the Agencies concur with the conclusions and recommendations in the report.

Therefore, the only further actions necessary for this unit are continued groundwater monitoring required by the WVDP Groundwater Monitoring Plan, in conjunction with the continued management and inspection of the storage area.

If you have any questions regarding this matter, please contact the DEC Project Coordinator at (518) 457-9253 or Mr. Brian Quinn, EPA Project Coordinator at (212) 637-3909.

Sincerely,

Timothy I. DiGiulio, P.E.
Project Coordinator
Bureau of Haz. Waste Facilities
Division of Solid and Haz. Materials

for Raymond Basso
Chief
RCRA Programs Branch
Environmental Planning & Protection Division
USEPA, Region II

cc: C. Gerwitz, NYSERDA W. Valley
B. Quinn, USEPA, Reg II
J. Krajewski, Region 9
R. Steiner, WVNS
P. Merges

RW:96:0049

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Hazardous Waste Facilities
Wolf Road, Albany, New York 12233-7252
457-9253 FAX 518-457-9240

Michael D. Zagata
Commissioner

November 22, 1996

Ms. Elizabeth A. Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Lowes:

RE: 3008(h) Order on Consent
RCRA Facility Investigation (RFI) Report Approval
Low-Level Waste Treatment Facility -Volume 4

The New York State Department of Environmental Conservation (DEC) and the Environmental Protection Agency (EPA) have evaluated the comment and response package attached to your June 20, 1996 letter (comments dated 5/31/96, page revisions Rev. 0). Based on this evaluation, the final *RCRA Facility Investigation (RFI) Report, Low-Level Waste Treatment Facility* -Volume 4, Rev. 0, is acceptable.

Summarized below, are items included in the comment response package and report's conclusions and recommendations for the continued long-term monitoring/investigation necessary for this unit:

1. An investigation into the source of elevated nickel and chromium will be discussed as part of the comment response package prepared to address the Agency comments on the WVDP Groundwater Monitoring Plan.

2. Continued groundwater monitoring for mercury will be conducted at wells 111 and 86-05 as part of the expanded characterization.

3. Continued groundwater monitoring downgradient of Lagoon 1 and 2, which includes wells 8605 and 111 for Appendix 33 VOCs, metals and SVOCs and well 110 for VOCs on an annual basis.

4. Well 103 shall be sampled quarterly for radiological indicator parameters. Expanded parameters may be considered based on observed changes in radiological indicators in that well.

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220

Michael D. Zagata
Commissioner

December 16, 1996

Ms. Elizabeth Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, NY 14171-0191

Dear Ms. Lowes:

RE: RCRA 3008(h) Order on Consent
RCRA Facility Assessment (RFA)
Product Storage Area Solid Waste Management Area (SWMU)

The New York State Department of Environmental Conservation (DEC) and United States Environmental Protection Agency have completed review of the RCRA Facility Assessment for the Product Storage Area (SWMU #42) dated May 1995.

Review of the RFA revealed no existing sources of hazardous substances for release to the environment. No evidence was found of past hazardous substance releases nor any impacts to the environment. Results of the Visual Site Inspection, Sampling Visit and the RCRA Facility Investigation, in particular Volume 5 - Miscellaneous Small Units and Volume 10 - Liquid Waste Treatment System, were also considered in evaluating conditions in the Product Storage Area. Based on this review, a determination of no further action is made for the Product Storage Area. This determination is subject to review if information is discovered in the future indicating conditions contrary to those under which this determination was made.

Any questions regarding this determination should be directed to Mr. John Krajewski of the DEC Buffalo office at 716-851-7220 or Mr. Brian Quinn, EPA Project Coordinator at 212-637-3909.

Sincerely,

for Timothy I. DiGiulio, P.E.
Project Coordinator
Bureau of Hazardous Waste Facilities
Division of Solid & Hazardous Materials

for Raymond Basso
Chief
RCRA Programs Branch
Environmental Planning & Protection Division
USEPA, Region II

44299
2038:96

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Hazardous Waste Facilities
50 Wolf Road, Albany, New York 12233-7252
518-457-9253 FAX 518-457-9240

John P. Cahill
Acting Commissioner

February 11, 1997

Ms. Elizabeth A. Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Lowes:

RE: 3008(h) Order on Consent
RCRA Facility Investigation (RFI) Report Approval
High-level Waste Storage and Processing Area -Volume 8

The New York State Department of Environmental Conservation (DEC) and the Environmental Protection Agency (EPA) have reviewed the draft *RCRA Facility Investigation (RFI) Report, High-level Waste Storage and Processing Area* -Volume 8 of 10, Rev. 0, Draft C, dated December 1995. Based on this review, the report is acceptable.

Summarized below, are items included in the report's conclusions and recommendations for the continued long-term monitoring and closure necessary for this unit:

1. Continued groundwater monitoring at downgradient monitoring wells 406, 408, 8607 and 8609 for the following parameters:

   a. Radiological indicator parameters on a semi-annual basis.

   b. Appendix 33 VOCs on an annual basis.

2. Perform RCRA closure of the tank system and ancillary equipment pursuant to 6 NYCRR Subpart 373-3 Interim Status Standards.

3. Additional rounds of groundwater sampling and analysis have been performed for RCRA metals. Based on this data, submit a supplemental statistical evaluation to support the conclusion and recommendations.

44989
0254.97

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Hazardous Waste Facilities
Wolf Road, Albany, New York 12233-7252
457-9253 FAX 518-457-9240

John P. Cahill
Acting Commissioner

March 6, 1997

Ms. Elizabeth A. Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Lowes:

RE: 3008(h) Order on Consent
RCRA Facility Investigation (RFI) - Report Approval
Liquid Waste Treatment System - Volume 10

The New York State Department of Environmental Conservation (DEC) and the Environmental Protection Agency (EPA) have completed review of the *RCRA Facility Investigation (RFI) Report, Liquid Waste Treatment System - Volume 10 of 10*, Rev.0, Draft B, dated March 1996. Based on that review, the Agencies concur with the conclusions and recommendations in the report.

Therefore, the only further actions necessary for this unit are continued groundwater monitoring required by the WVDP Groundwater Monitoring Plan. The monitoring requirements are subject to modification pending the results of the field project to evaluate nickel and chromium levels in groundwater.

Since Volume 10 is the last of the RFI reports the groundwater monitoring requirements in each volume should be compared to those listed in the WVDP Groundwater Monitoring Plan, Revision 2 dated 12/5/96. Any deviations should be corrected by revisions in the corresponding RFI volume.

If you have any questions regarding this matter, please contact the DEC Project Coordinator at (518) 457-9253 or Mr. Brian Quinn, EPA Project Coordinator at (212) 637-3909.

Sincerely,

Timothy I. DiGiulio, P.E.
Project Coordinator
Bureau of Hazardous Waste Facilities
Division of Solid & Hazardous Materials

Raymond Basso
Chief
RCRA Programs Branch
Division of Environmental Planning & Protection
USEPA, Region II

cc : C. Gerwitz, NYSERDA W. Valley
B. Quinn, USEPA, Reg II
J. Krajewski, Region 9
R. Steiner, WVNS
P. Merges

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Hazardous Waste Facilities
50 Wolf Road, Albany, New York 12233-7252
518-457-9253 FAX 518-457-9240

John P. Cahill
Acting Commissioner

June 16, 1997

Ms. Elizabeth A. Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
West Valley, New York 14171-0191

Dear Ms. Lowes:

Re: 3008(h) Order on Consent
RCRA Facility Investigation (RFI) - Report Approval
Maintenance Shop Leach Field - Volume 9

The New York State Department of Environmental Conservation (DEC) and the United States Environmental Protection Agency (EPA) have reviewed the "Comment Response Package" and "Page Changes for the Draft Report" dated May 2, 1997. The response adequately addresses the DEC/EPA joint comments included in the letter dated February 25, 1997. Therefore, the Agencies concur with the conclusions and recommendations of the Report.

As part of that recommendation, the following activities will take place:

1. Contaminated sediment and water will be removed from septic tank #1 and #3 (tank #2 was previously closed) this summer and closed out in accordance with the relevant regulations. Provide the Agencies with a schedule of implementation and details on the closure activities within thirty (30) days from the date of this letter.

2. Continue to monitor wells 501 and 502 as required by the West Valley Demonstration Project Groundwater Monitoring Plan.

If you have any questions regarding this matter, please contact the DEC Project Coordinator at (518) 457-9253 or Mr. Brian Quinn, EPA Project Coordinator at (212) 637-3909.

Sincerely,

Timothy I. DiGiulio, P.E.
Project Coordinator
Bureau of Hazardous Waste Facilities
Division of Solid & Hazardous Materials

for Raymond Basso
Chief
RCRA Programs Branch
USEPA, Region 2

:: C. Gerwitz. NYSERDA
B. Quinn. USEPA, Region 2
R. Steiner. WVNS
J. Krajewski. Region 9
P. Merges

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220

John P. Cahill
Commissioner

Recd.- Rec. Mgmt.
RW:97:0031
August 6, 1997

July 31, 1997

Ms. Elizabeth Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
PO Box 191
West Valley, NY 14171-0191

Dear Ms. Lowes:

Re: Resource Conservation and Recovery Act 3008(h) Administrative Order on Consent [Docket No.II RCRA-3008(h) 92-0202] Supplemental Solid Waste Management Unit (SWMU) #29 - Industrial Waste Storage Area (IWSA)

The New York State Department of Environmental Conservation (DEC) and the United States Environmental Protection Agency (EPA) have completed an evaluation of the documents and data pertaining to SWMU #29 - Industrial Waste Storage Area (IWSA).

No sources of hazardous substances were identified nor was there evidence of any releases of hazardous substances to the environment. It follows that no negative impacts on the environment from the IWSA were identified.

Based on these results, a determination of no further action is made for the Industrial Waste Storage Area SWMU #29. This determination is subject to review should evidence be discovered in the future indicating conditions contrary to those that are now thought to exist.

If you have any questions regarding this letter, please contact Mr. John Krajewski of the NYSDEC at 716-851-7278.

Very truly yours,

John Krajewski for

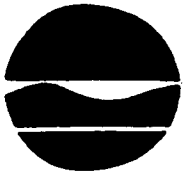
Timothy I. DiGiulio, P.E.
Project Coordinator, Bureau of
Hazardous Waste Facilities Division
Of Solid and Hazardous Materials

John Krajewski for

Raymond Basso, Chief
RCRA Programs Branch
USEPA, Region 2

cc: C. Gerwitz, NYSERDA
B. Quinn, USEPA Region 2
R. Steiner, WVNS
J. Krajewski, DEC Region 9
P. Merges, DEC Albany

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220



John P. Cahill
Commissioner

August 26, 1997

Ms. Elizabeth Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Lowes:

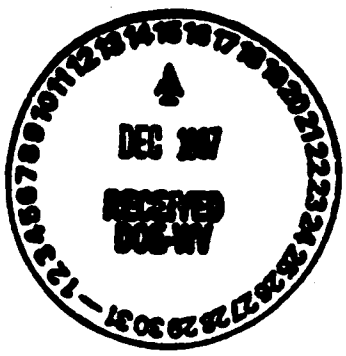
Resource Conservation and Recovery Act 3008(h)
Administrative Order on Consent
(Docket No. II RCRA-3008(h)
92-0202) Supplemental Solid Waste Management Unit (SWMU) #31- NDA Trench Soil Container Area

The New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (EPA) have completed an evaluation of the documents and data concerning SWMU #31 - the NDA Trench Soil Container Area. Based on the results of this evaluation the agencies are now prepared to determine further action regarding SWMU #31.

Hazardous substances were not detected in the soils in the roll-offs and in only trace amounts in areas adjacent to the soil source area. Metals were not detected at levels of concern. Radiological test results indicate levels only slightly above background in the soils contained in the roll-offs. No impacts on soils or groundwater were detected in the storage area.

Therefore, a determination of no further action is made for SWMU #31 - NDA Trench Soil Container Area. This determination is subject to review should evidence be discovered indicating conditions contrary to those evaluated by the agencies in making this determination.

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
'16) 851-7220



John P. Cahill
Commissioner

December 15, 1997

Ms. Elizabeth Lowes
Environmental Team Leader
US Department of Energy
West Valley Project Office
PO Box 191
West Valley, New York 14171-0191

Dear Ms. Lowes:

Re: Resource Conservation and Recovery Act 3008 (h) Administrative Order on Consent (Docket No. #11 RCRA - 3008(h) 92-0202) Supplemental Solid Waste Management Unit (SWMU) #44 - Fuel Receiving and Storage Area HIC and Surepak TM Staging Area

The New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) have completed an evaluation of the documents and data pertaining to SWMU #44 - Fuel Receiving and Storage Area HIC and Surepak TM Staging Area. Based on the results of this evaluation the agencies are now prepared to determine further action regarding SWMU #44.

The combined HIC and Surepak TM container provide primary and secondary containment for the hazardous waste in question. There have been no reported releases hazardous waste, nor is there field evidence of any releases from the container. There is no additional hazardous waste being generated for this SWMU and there is a plan for disposition of this waste in the WVDP Federal Facility Compliance Act Site Treatment Plan.

53327

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Hazardous Waste Facilities
50 Wolf Road, Albany, New York 12233-7252
518-457-9253 FAX 518-457-9240

John P. Cahill
Commissioner

January 22, 1998

Ms. Elizabeth A. Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Recd.- Rec. Mgmt
RW:98:0016
February 10, 1998

Dear Ms. Lowes:

RE: 3008(h) Order on Consent - Sealed Rooms

The New York State Department of Environmental Conservation (DEC) and the U.S. Environmental Protection Agency (EPA) have completed evaluating data associated with the sealed rooms located in the process building. Many of these rooms are restricted from entering due to high radiation levels, thus requiring the Agencies to rely on historical information and data collected as part of the RCRA Facility Investigation to evaluate the potential impacts these units may have.

Review of soil sampling data and routine groundwater monitoring taken in the vicinity of the process building support the conclusion that the sealed rooms do not pose a significant threat from the release of hazardous waste or hazardous constituents. To date, samples taken from groundwater monitoring wells down gradient from the process building have not shown elevated hazardous waste constituents. It is anticipated however, that current evaluation and the present pump and treatment program will continue in this area for elevated levels of gross beta in groundwater, which is not affiliated with this Order on Consent.

Therefore, the only further actions necessary at this time for the Sealed Rooms is continued groundwater monitoring required pursuant to the West Valley Demonstration Project's Groundwater Monitoring Plan.

If you have any questions regarding this matter, please contact the DEC Project Coordinator at (518) 457-9253 or Mr. Brian Quinn, EPA Project Coordinator at (212) 637-3909.

Sincerely,

Timothy I. DiGiulio, P.E.
Project Coordinator

for James Reidy, P.E.
RCRA Programs Branch
Division of Environmental Planning & Protection
USEPA, Region II

cc: C. Gerwitz, NYSERDA W. Valley
B. Quinn, USEPA, Reg II
J. Krajewski, Region 9
R. Steiner, WVNS

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220

John P. Cahill
Commissioner

January 29, 1998

Ms. Elizabeth Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Lowes:

Resource Conservation and Recovery Act 3008 (h) Administrative Order on Consent (Docket No. #11 RCRA - 3008 (h) 92-0202) Supplemental Solid Waste Management Unit (SWMU) #37 Contact Size Reduction Facility

The New York State Department of Environmental Conservation (NYSDEC) and the Unit States Environmental Protection Agency (USEPA) have completed an evaluation of the document and data pertaining to SWMU #37 Contact Size Reduction Facility (CSRF). Based on the result of this evaluation, the agencies are now prepared to determine further action regarding SWMU #37.

Currently, no hazardous waste is treated, stored or disposed of in the CSRF. The only activity taking place is waste sampling for characterization and re-packing. This activity is required for waste covered under the Federal and State Facilities Compliance Agreement and is scheduled for completion by April 1999. The CSRF also has secondary and tertiary containmen

There are no identifiable environmental impacts from activities in the CSRF. This is bas on review of information and analytical data generated during the site RCRA Facility Investigati and Post-RFI ground water monitoring.

Therefore, a determination of no further action is made for SWMU #37 - Contact Size Reduction Facility. This determination is subject to review should evidence be discovered indicating conditions contrary to those evaluated by the agencies in making this determination.

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220

John P. Cahill
Commissioner

Recd.- Rec. Mgmt.
RW:98:0021
March 10, 1998

March 9, 1998

Ms. Elizabeth Lowes
Environmental Team Leader
U.S. Department of Energy
West Valley Project Office
P.O. Box 191
West Valley, New York 14171-0191

Dear Ms. Lowes:

Resource Conservation and Recovery Act 3008 (h) Administrative Order on Consent (Docket No. #11 RCRA - 3008 (h) 92-0202) Supplemental Solid Waste Management Unit (SWMU) #41 Designated Roadways

The New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) have completed an evaluation of th documents and data pertaining to SWMU #41 Designated Roadways. Based on the results o this evaluation, the agencies are now prepared to determine whether further action is necessa regarding SWMU #41.

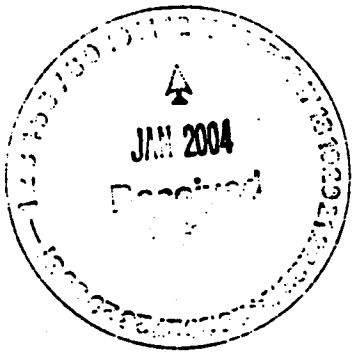
There are no identifiable environmental impacts from past activities in the Designated Roadways. This is based on review of information and analytical data generated during the site RCRA Facility Investigation, Post-RFI ground water monitoring and the Preliminary Review.

Therefore, a determination of no further action is made for SWMU #41 - Designated Roadways. This determination is subject to review should evidence be discovered indicating conditions contrary to those evaluated by the agencies in making this determination.

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Hazardous Waste & Radiation Management
625 Broadway, Albany, NY 12233-7258
Phone: (518) 402-8594 • FAX: (518) 402-9025
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

VIA FAX & MAIL



January 7, 2004

Ms. Moira N. Maloney
Environmental Scientist
Office of Compliance and Support
Department of Energy, Ohio Field Office
10282 Rock Springs Road
West Valley, NY 14171-9799

Dear Ms. Maloney:

Re: Determination of Status of Solid Waste Management Units/Areas of Concern (SWMU/AOC) at the West Valley Demonstration Project
USEPA ID: NYD980779540

This is in response to your letters dated August 13, 2003, August 15, 2003, and October 2, 2003 concerning the final status, grouping and determination of further action for different SWMUs identified at the facility. The Department has evaluated the information provided in the above referenced letters and find that the information as presented is limited, fragmented and is generally difficult to analyze in the absence of information related to current conditions at the facility and other SWMU/AOC at the facility.

For purposes of the Department's evaluation we request that all supporting information for regulatory decision making to be consolidated into a comprehensive "SWMU/AOC Assessment and Description of Current Conditions Report." This report should include the summarization of the details of the SWMUs/AOCs and characterization of the current conditions at the facility. This information should already have been compiled for the Corrective Action Section of the Part B Permit Application.

This report should summarize all available information and data on the facility's background, SWMU/AOC characterization, nature and extent of contamination, potential receptors, and prevailing corrective action implementation. The report needs to be supported by plans and drawings depicting the SWMU/AOC locations, monitoring and investigative well locations along with groundwater flows depicting topographic and groundwater contours. This data and information will then be used to support the different SWMU groupings and determinations of no further action and/or to plan subsequent field investigations or development of the respective work plans for the SWMUs and AOCs that need to be further investigated.

SCOPE OF WORK FOR A CORRECTIVE MEASURE STUDY

I. PURPOSE

The purpose of this Corrective Measure Study (CMS) is to develop and evaluate the corrective action alternative or alternatives and to recommend the corrective measure or measures to be taken. This document serves as guidance for developing a CMS and much of its content may not be applicable, especially when developing a focused CMS addressing a presumptive remedy. Respondent should consult with Department representatives before beginning the CMS process regarding which items need to be addressed during the study. The permittee will furnish the personnel, materials, and services necessary to prepare the corrective measure study, except as otherwise specified.

II. SCOPE

The Corrective Measure Study consists of four tasks:

Task I: Identification and Development of the Corrective Measure Alternative or Alternatives

- A. Description of Current Situation
- B. Establishment of Corrective Action Objectives
- C. Screening of Corrective Measures Technologies
- D. Identification of the Corrective Measure Alternative or Alternatives

Task II: Evaluation of the Corrective Measure Alternative or Alternatives

- A. Technical/Environmental/Human Health/Institutional
- B. Cost Estimate

Task III: Justification and Recommendation of the Corrective Measure or Measures

- A. Technical
- B. Human Health
- C. Environmental

identify additional technologies which are applicable at the facility. The permittee shall screen the preliminary corrective measure technologies identified in Task II of the RFI and any supplemental technologies to eliminate those that may prove infeasible to implement, that rely on technologies unlikely to perform satisfactorily or reliably, or that do not achieve the corrective measure objective within a reasonable time period. This screening process focuses on eliminating those technologies which have severe limitations for a given set of waste and site-specific conditions. The screening step may also eliminate technologies based on inherent technology limitations. Site, waste, and technology characteristics which are used to screen inapplicable technologies are described in more detail below:

1. Site Characteristics

   Site data should be reviewed to identify conditions that may limit or promote the use of certain technologies. Technologies whose use is clearly precluded by site characteristics should be eliminated from further consideration;

2. Waste Characteristics

   Identification of waste characteristics that limit the effectiveness or feasibility of technologies is an important part of the screening process. Technologies clearly limited by these waste characteristics should be eliminated from consideration. Waste characteristics particularly affect the feasibility of in-situ methods, direct treatment methods, and land disposal (on/off-site); and

3. Technology Limitations

   During the screening process, the level of technology development, performance record, and inherent construction, operation, and maintenance problems should be identified for each technology considered. Technologies that are unreliable, perform poorly, or are not fully demonstrated may be eliminated in the screening process. For example, certain treatment methods have been developed to a point where they can be implemented in the field

The permittee shall evaluate each corrective measure alternative based on performance, reliability, implementability and safety.

(a) The permittee shall evaluate performance based on the effectiveness and useful life of the corrective measure:

(i) Effectiveness shall be evaluated in terms of the ability to perform intended functions, such as containment, diversion, removal, destruction, or treatment. The effectiveness of each corrective measure shall be determined either through design specifications or by performance evaluation. Any specific waste or site characteristics which could potentially impede effectiveness shall be considered. The evaluation should also consider the effectiveness of combinations of technologies; and

(ii) Useful life is defined as the length of time the level of effectiveness can be maintained. Most corrective measure technologies, with the exception of destruction, deteriorate with time. Often, deterioration can be slowed through proper system operation and maintenance, but the technology eventually may require replacement. Each corrective measure shall be evaluated in terms of the projected service lives of its component technologies. Resource availability in the future life of the technology, as well as appropriateness of the technologies, must be considered in estimating the useful life of the project.

(b) The permittee shall provide information on the reliability of each corrective measure including their operation and maintenance requirements and their demonstrated reliability:

(ii) Time has two components that shall be addressed: (1) the time it takes to implement a corrective measure; and (2) the time it takes to actually see beneficial results. Beneficial results are defined as the reduction of contaminants to some acceptable, pre-established level.

(d) The permittee shall evaluate each corrective measure alternative with regard to safety. This evaluation shall include threats to the safety of nearby communities and environments as well as those to workers during implementation. Among the factors to consider are fire, explosion, and exposure to hazardous substances.

1. Capital costs consist of direct (construction) and indirect (nonconstruction and overhead) costs.

   (a) Direct capital costs include:

      (i) Construction costs: Costs of materials, labor (including fringe benefits and worker's compensation), and equipment required to install the corrective measure;

      (ii) Equipment costs: Costs of treatment, containment, disposal and/or service equipment necessary to implement the action; these materials remain until the corrective action is complete;

      (iii) Land and site-development costs: Expenses associated with purchase of land and development of existing property; and

      (iv) Buildings and services costs: Costs of process and non-process buildings, utility connections, purchased services, and disposal costs.

   (b) Indirect capital costs include:

      (i) Engineering expenses: Costs of administration, design, construction supervision, drafting, and testing of corrective measure alternatives;

      (ii) Legal fees and license or permit costs: Administrative and technical costs necessary to obtain licenses and permits for installation and operation;

      (iii) Startup and shakedown costs: Costs incurred during corrective measure startup; and

      (iv) Contingency allowances: Funds to cover costs resulting from unforeseen circumstances, such as adverse weather conditions, strikes, and inadequate facility characterization.

(i) Other costs: Items that do not fit any of the above categories.

V. TASK III: JUSTIFICATION AND RECOMMENDATION OF THE CORRECTIVE MEASURE OR MEASURES

The permittee shall justify and recommend a corrective measure alternative using technical, human health, and environmental criteria. This recommendation shall include summary tables which allow the alternative or alternatives to be understood easily. Tradeoffs among health risks, environmental effects, and other pertinent factors shall be highlighted. The Commissioner will select the corrective measure alternative or alternatives to be implemented based on the results of Tasks II and III of this document. At a minimum, the following criteria will be used to justify the final corrective measure or measures.

A. Technical

1. Performance - corrective measure or measures which are most effective at performing their intended functions and maintaining the performance over extended periods of time will be given preference;

2. Reliability - corrective measure or measures which do not require frequent or complex operation and maintenance activities and that have proven effective under waste and facility conditions similar to those anticipated will be given preference;

3. Implementability - corrective measure or measures which can be constructed and operated to reduce levels of contamination to attain or exceed applicable standards in the shortest period of time will be preferred; and

4. Safety - corrective measure or measures which pose the least threat to the safety of nearby residents and environments as well as workers during implementation will be preferred.

B. Human Health

The corrective measure or measures must comply with existing EPA and/or State criteria, standards, or guidelines for the protection of human health.

VI. TASK IV: REPORTS

A. Progress Reports

The permittee shall provide the Commissioner with signed progress reports as required by part 373 permit Module II Condition B.8.(a).

B. Corrective Measures Study ("CMS") Final Report

The permittee shall prepare a CMS Final Report as required by part 373 permit Module II Condition E.8. The CMS Final Report shall include all information gathered under the approved CMS Workplan. The CMS Final Report shall at a minimum include:

1. A description of the facility;

    (a) Site topographic map and preliminary layouts.

2. A summary of the corrective measure or measures;

    (a) Description of the corrective measure or measures and rationale for selection;

    (b) Performance expectations;

    (c) Preliminary design criteria and rationale;

    (d) General operation and maintenance requirements; and

    (e) Long-term monitoring requirements.

3. A summary of the RCRA Facility Investigation and impact on the selected corrective measure or measures;

    (a) Field studies (groundwater, surface-water, soil, air); and

    (b) Laboratory studies (bench scale, pilot scale).

4. Design and Implementation Precautions;

    (a) Special technical problems;

    (b) Additional engineering data required;

APPENDIX B

DOE CORRESPONDENCE

Department of Energy
Ohio Field Office
West Valley Area Office
P.O. Box 191
West Valley, NY 14171

DW 1998 1020

May 29, 1998

Mr. Brian Quinn, Project Coordinator
U. S. Environmental Protection Agency, Region II
22nd Floor (DEPP-RPB)
290 Broadway
New York, NY 10007-1866

Mr. Timothy I. DiGiulio, Project Coordinator
Bureau of Hazardous Compliance and Land Management
Division of Solid and Hazardous Materials
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7251

SUBJECT: Removal of Solid Waste Management Unit (SWMU) #38, Drum Super Compactor, and Change in RCRA 3008(h) Consent Order Meeting Frequency

Gentlemen:

As discussed at the April 30, 1998, Consent Order meeting, the West Valley Demonstration Project (WVDP) is no longer using SWMU #38, the Drum Super Compactor and was planning on transporting it to the Department of Energy's (DOE) Savannah River Site for their use. The unit was subsequently shipped on May 14, 1998.

The frequency of future meetings to review Consent Order activities was also discussed at the April 30, 1998, meeting. Since the RCRA Facility Investigation (RFI) activities have been completed and we are presently in a monitoring mode, it was decided that the meetings will be changed from quarterly to twice a year. As discussed, the meetings will generally be held in the Spring and Fall. Consistent with this schedule, the next meeting will be conducted sometime in the October 1998 time frame.

Please do not hesitate to call me at (716) 942-4930 if you have any questions regarding this information.

Sincerely,

Elizabeth Lowes

E. A. Lowes, Team Leader
Regulatory Planning and Stakeholder Interface Team

cc: See Page 2
EAL:022 - 58623 - 452.2.1

Not a Record Copy 7/10/98

Department of Energy
Ohio Field Office
West Valley Demonstration Project
P.O. Box 191
West Valley, NY 14171

Recd.
Rec. Mgmt.
October 15, 1998

DW:1998:1361

October 13, 1998

Mr. Jack Krajewski
Engineering Geologist II
Division of Hazardous Substance Regulation - Region 9
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

SUBJECT: Transmittal of the "Response to the New York State Department of Environmental Conservation's (NYSDEC) Comments on the Final Report Evaluation of the Pilot Program to Investigate Chromium and Nickel Concentrations in Groundwater in the Sand and Gravel Unit"

REFERENCE: Letter RW:1998:1019 (60389), J. Krajewski to D. Klenk, "Nickel/Chromium Groundwater Investigation," dated September 16, 1998

Dear Mr. Krajewski:

This letter transmits the West Valley Demonstration Project's (WVDP) response to the comments received from the NYSDEC on the Final Report - "Evaluation of the Pilot Program to Investigate Chromium and Nickel Concentrations in Groundwater in the Sand and Gravel Unit" (Referenced letter).

Enclosed, please find the WVDP's responses to the NYSDEC comments. NYSDEC agrees with the conclusion that the elevated levels of nickel and chromium are not related to a release from a solid waste management unit. Therefore, as discussed at the RCRA 3008 (h) Consent Order meeting held at the WVDP on September 23, 1998, sampling for chromium and nickel at wells included in this project will cease with this past sampling round. Corrosion monitoring and control will be further evaluated and discussed with your department.

Response to comments received from the NYSDEC (dated September 16, 1998) on the Final Report: Evaluation of the Pilot Program to Investigate Chromium and Nickel Concentrations in Groundwater in the Sand & Gravel Unit (dated June 1998).

1. NYSDEC Question: Reference, Page 3, section 1.2

"Is there any significance to the general increase in corrosion from the top to the bottom of the well screens?

WVDP Response: We suspect there may be a couple of factors that could cause the top of the well screens to exhibit less corrosion than the bottom of the well screens:

- The top of the well screens may not always be in contact with the water due to water level changes therefore may display less corrosion than the bottom of the screens which are nearly always in contact with groundwater;
- Additionally when sampling (specifically purging operations) the well screen would be subject to drawdown (higher energy) in the upper portions of the well screen

2. NYSDEC Question: Reference, Page 12, section 4.1

" The ANOVA results do indicate a significant decrease of chromium and nickel in a number of the test wells, i.e., 67% for chromium and 50% for nickel. Although these results are convincing, they do bring to light the short comings of the bladder pump wells and the potential problems of wells with slow recovery.

WVDP Response: The variability of the results appears to be more problematic using bladder pumps in wells with slower recovery.

3. NYSDEC Question: Reference, page 15

"Why wasn't a confidence level higher than 80% attained?

WVDP Response: The 80% level of confidence was previously identified in WVDP-266 " Field Data Collection Plan for Evaluating Chromium and Nickel in Groundwater" (Reference Page 11, Appendix B, Statistical Method for Evaluating Elevated Chromium and Nickel in Groundwater, section 2.0, Selected Methods). This was based upon possible decision errors and outcomes.

DW:1998:1361

D. P. Klenk	AOC-24
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APPENDIX C

SEPTEMBER 30, 2004 LISTING OF HAZARDOUS WASTE SATELLITE ACCUMULATION AREAS AND 90-DAY STORAGE AREAS

HAZARDOUS WASTE - SATELLITE ACCUMULATION AREAS

SAA #	Location	Material	Container	Resp Manager	Setup Date	Disc Date	Status
1	Maintenance	Aerosol cans	53 gallon drum	D.C. Roth	12/30/1999		Active
2	Radiochemistry Lab Hood #4	Tc organic waste	4L. Glass bottle	J.A. Hoffman		3/30/2000	Taken out of Service
3	Radiochemistry Lab Hood #1	Tc aqueous waste	2L. Poly bottle	J.A. Hoffman		3/30/2000	Taken out of Service
4	Sample Prep Lab	Mercury & Acid Metrix	Max. 2L.	J.A. Hoffman	12/30/1999		Active
5	Radiochemistry Lab	Tc waste	Max. 5L.	J.A. Hoffman	12/30/1999		Active
6		Eliminated					Taken out of Service
7		Eliminated					Taken out of Service
8	Vit Fabrication Facility	Paint waste	Various	C.C. LeNoie		5/3/2001	Taken out of Service
9	Blueprint	Camera Waste	Ten (10) 10 liter carboys	C.C. Gerwitz		10/2/2003	Taken out of Service
10	Off Gas Blower Room	Vessle Off Gas Filter	Box	W.P. Freaney	3/23/2000	4/17/2001	Taken out of Service
11	CSS Truck Stop	01-14 filter	Box	W.P. Freaney	4/6/2000	4/11/2000	Taken out of Service
12	FRS/Hittman Bldg	Oily Wipes with PCB's	55 Gallon Drum	J.F. Jablonski	8/7/2000	9/7/2000	Taken out of Service
13	02	Lead/Paint Chips	55 Gallon Drum	J.M. Lauber	8/7/2000	8/23/2000	Taken out of Service
14	WTF	8D2 - Wall Decon Material	55 Gallon Drum	R.A. Dunn	9/7/2000	3/2/2001	Taken out of Service
15	WWTF	Ammonia Analysis Waste	55 Gallon Drum	B.C. Covert	9/20/2000		Active
16	WWTF	COD Analysis Waste	55 Gallon Drum	B.C. Covert	9/20/2000		Active
17	WMOA	Paint Waste w/Lead	5 Gallon Pail	B. C. Covert	11/15/2000	11/16/2000	Taken out of Service
18	GPC Crane Room	Lead Based Paint	Bags(>55 gallons)	B. C. Covert	2/2/2001	5/3/2001	Taken out of Service
19	Crane Maint. Room	Oil w/Selenium & Benzene	5 Gallon Pails	J Cursio	5/21/2001	9/29/2004	Taken out of Service

HAZARDOUS WASTE - 90 DAY STORAGE AREA

	Location	Material	Container	Resp Manager	Setup Date	Disc Date	Status
1	WMSA	Aersol can puncture liquid	Various	K.E. Sanders	3/9/2000		Intermitent Use
2	XCR	Potential Mercury Contaminated Tank & Piping	Box	B.C. Covert	6/30/2000	8/14/2000	Out of service
3	FRS	PCB Contaminated Cleanup Debris	Multiple 55 Gal. Drums	J.F. Jablonski	9/7/2000	3/1/2001	Out of service
4	Shipping Depot	Zinc Bromide W/Cadmium and Lead	Multiple 55 Gal Drums	R.S. Roberts	11/15/2000	11/16/2000	Out of service
5	ULO	Mercury Debris	Box	B.C. Covert	1/3/2001	1/4/2001	Out of service
6	WTF	8D-2 Wall Debris (metals)	Multiple 55 Gal. Drums	R.A. Dunn	3/2/2001	5/30/2001	Out of service
7	ARPR	Acidic Liquid from Process Lines	Multiple 55 Gal. Drums	B.C. Covert		4/25/2001	Out of service
8	UR	Acidic Liquid from Process Lines in the ARPR	Multiple 55 Gal. Drums	B.C. Covert	3/21/2001	3/30/2001	Out of service
9	CSRF	Paint Chips W/Lead & Chrome	Multiple 55 Gal Drums	W.L. Zuppinger	5/14/2001	5/21/2001	Out of service
10	WRPA	Lead Transfer Cart	Box	W.L. Zuppinger	6/28/2001	7/2/2001	Out of service
11	UWA	Uranyl Nitrate	Multiple 55 Gal. Drums	B.C. Covert	7/18/2001	7/23/2001	Out of service
12	WTF	TRU Debris w/Metals	Multiple 55 Gal. Drums	R.A. Dunn	8/13/2001	11/27/2001	Out of service
13	KPSA	Mercury & Lead Debris, PCB Debris, Elemental Lead	Multiple Containers	B. L. Zuppinger	12/3/2001	12/6/2001	Out of service
14	FRS	FRS Pool Filters with Chromium	Multiple Containers	K.E. Sanders	2/25/2003	5/21/2003	Out of service
15	PSR-6 Staging Are	FRS Pool Filters with Chromium	Multiple Containers	K.E. Sanders			Out of service
16	Vit Vault Area	Vit Glass and Slurry	TC-298	K.E. Sanders	2/17/2004	5/5/2004	Out of service
17	EDR	Vit Glass and Slurry SBS Mercury Debris	TC Box	J Cursio	3/25/2004		Intermitent Use
18	Hardstand near CP	Sure Pack Containing Lead Acid Battery Drums	Sure Pack	K.E. Sanders	6/9/2004	6/30/2004	Out of service
19	FRS	Sure Pack Containing Lead Acid Battery	Sure Pack	K.E. Sanders	6/30/2004	7/26/2004	Out of service